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Two New Species of the Genus *Dooabia* from Wallasia (Geometridae, Geometrinae)*

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The genus *Dooabia* WARREN, 1894, is a rather small group, containing five species and three subspecies from the Indo-Malayan Region. Recently I had an opportunity to examine geometrid moths captured by Dr. M. OWADA, the National Science Museum, Tokyo, during a zoological expedition to the Philippines in 1985, and found a specimen of this genus. In addition to this, I was able to examine some specimens of another species from Sulawesi by the courtesy of Dr. H. INOUE, Otsuma Woman's University, and Mr. E. TSUKADA, Tokyo. In this paper I am going to describe these two species as new.

Before going further I wish to express my hearty thanks to Dr. M. OWADA, the National Science Museum (Nat. Hist.), Tokyo, for his kind permission to examine invaluable specimens from the Philippines and reading through the manuscript. My gratitude is also due to Dr. H. INOUE, Otsuma Woman's University, Iruma, and Mr. E. TSUKADA, Tokyo, for their loan or gift of specimens.

Dooabia owadai sp. nov. (Fig. 1)

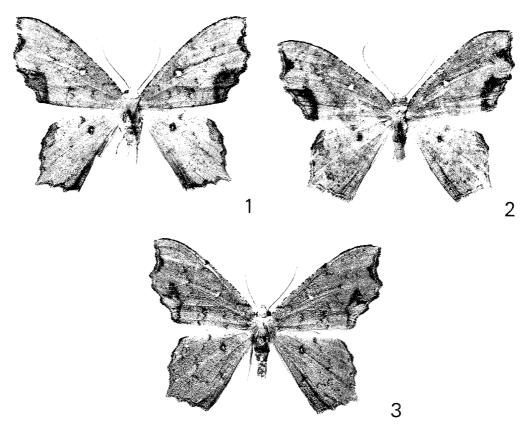
Expanse 29 mm. Very similar to D. puncticostata PROUT, 1923, Ann. Mag. nat. Hist., (9) 11: 306, from the Malay Peninsula. Hindwing with a tail at M_3 much longer than in puncticostata.

Ground color of both wings yellowish green, while in *puncticostata* it is rather bluish. In forewing dark green ante- and postmedian lines sinuous and not so conspicuous; brown tornal blotch without anterior proximal projection which is present in *puncticostata*; discocellular dot white, larger, surrounded by dark green shade paler than in *puncticostata*. Hindwing scattered with dark green scales in basal portion and distal half; postmedian line indicated only by a dark green patch below costa; discocellular dot white, surrounded by dark green shade.

Male genitalia (Fig. 5). Uncus flattened; socius of a sclerotized long process, broader and more strongly curved near apex than in *puncticostata*. Valva longer and more slender than in *puncticostata*; costa well sclerotized, slightly swollen at base. Aedeagus with five long spine-like cornuti and a bunch of short spines, while in *puncticostata* cornutus is wanting; vesica slightly scobinate. Eighth abdominal

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Figs. 1-3. *Dooabia* spp. 1. *D. owadai* sp. nov. 3, holotype; 2. *D. ambigua* sp. nov. 3, holotype; 3. *D. puncticostata* PROUT 3, Malay Peninsula.

segment strongly sclerotized; lateral projection longer, more slender, smooth, while in *puncticostata* it bears a spinulous protrusion near apex.

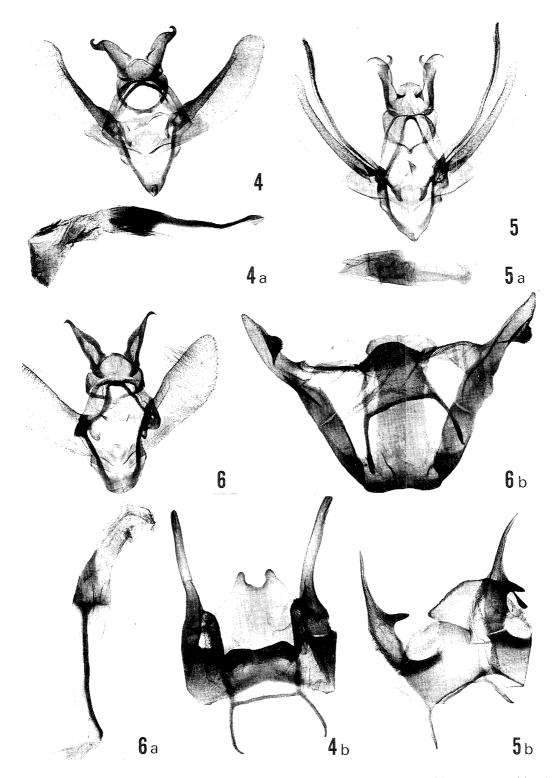
Holotype, ♂. Philippines, Mindanao, Davao, Upper Baracatan, Apo Range, Mt. Talomo (1,100 m), 17-19. VIII. 1985 (M. OWADA), Genitalia Slide No. NSMT 4549, preserved in the National Science Museum (Nat. Hist.), Tokyo.

This new species is closely related to *D. puncticostata*, but distinguished from it by the genital structures described above.

Dooabia ambigua sp. nov. (Fig. 2)

Expanse 28-34 mm. Similar to *D. puncticostata* and *D. owadai*. Forewing with termen rather weakly sinuous; hindwing with a tail at M_3 similar to that of *puncticostata*.

Ground color of both wings yellowish green. In forewing ante- and postmedian lines indistinct; shape of tornal blotch as in *owadai*, but it is much paler and broadly edged by dark brown in proximal portion; discocellular dot white, as large as in *owadai*. Hindwing as in *owadai*, but the brown patch at apex is much smaller; discocellular dot dark green, large, the central white spot inconspicuous or entirely wanting.



Figs. 4-6. Male genitalia and 8th abdominal segment of *Dooabia* spp. (a) aedeagus. (b) 8th abdominal segment. 4. *D. owadai* sp. nov., holotype; 5. *D. ambigua* sp. nov., holotype; 6. *D. puncticostata* PROUT.

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Male genitalia (Fig.6). Uncus broadly gibbous; socius with a curved process near apex. Gnathos with a tongue like projection at center. Valva extremely long and slender; sclerotized free arm arising from the base of costa, extending far beyond the distal margin of valva; costa widely sclerotized from base to near apex. Aedeagus rather short, vesica unarmed. Lateral projection of 8th abdominal segment long, tapered towards pointed tip, bearing a horn-like process at middle.

Holotype, ♂. Indonesia, Sulawesi, Palolo (700 m), II. 1986, Genitalia Slide No. KY – 588, preserved in the National Science Museum (Nat. Hist.), Tokyo.

Paratypes. Same locality as holotype, $1 \, \varnothing$, XII. 1985; Punkak Dingin (1,700 m), $2 \, \varnothing$, X – XI. 1985.

In appearance this new species is very similar to *D. puncticostata* and *D. owadai*, but markedly different from them in the genitalic characters, that is, free arm of valva and curved process of socius.

摘 要

フィリピンとスラウエシからの *Dooabia* 属(シャクガ科, アオシャク亜科)の二新種 (矢崎克己)

Dooabia WARREN はインド北部からスンダランドを中心に分布し、現在 5 種 3 亜種が知られるのみの小属である。本報ではフィリピンとスラウエシよりそれぞれ D. owadai YAZAKI, D. ambigua YAZAKI の二新種を記載した。両種とも外観はマレーシア、ボルネオ等に分布する D. puncticostata PROUT によく似るが、雄交尾器形態によって容易に区別される。

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